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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/660,005	09/12/2000	Thomas E. Saulpaugh	5181-66200	6061

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ATTEN: ROBERT C. KOWERT
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EXAMINER

PHAN, TAM T

ART UNIT	PAPER NUMBER
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2144

DATE MAILED: 10/04/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/660,005

Applicant(s)

SAULPAUGH ET AL.

Examiner

Tam (Jenny) Phan

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-28 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 12 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This application has been examined. Claims 1-28 are presented for examination.

Priority

2. This application claims benefit of the provisional application 60/202,975 (05/09/2000), 60/208,011 (05/26/2000), 60/209,430 (06/02/2000), 60209,140 (06/02/2000), 60/209,525 (06/05/2000).

3. The effective filing date for the subject matter defined in the pending claims, which has support in parent provisional application is the filing date of that provisional application. Any new subject matter defined in the claims not previously disclosed in parent provisional application, is entitled to the effective filing date of 09/12/2000.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1-2, 8-23, 29-43 of U.S. Patent No. 6,792,466. Although the conflicting claims are not identical, they are not patentably

Art Unit: 2144

distinct from each other because the instant application claims are obvious variations of the patented claims which dictate the step of constructing a message endpoint is performed within a runtime environment of a device wherein the instant patented claims, the pre-generated message interface is built into the device. Pre-built computer-executable code built into a device is well known at the time of the invention was made. Refer to PTO-892 for relevant prior art of record. In addition, refer to the below observation for obvious variations of claimed limitations of the instant application and claimed limitation of the pending application.

U.S. Patent Number 6,792,466	Instant Application 09/660,005
<p>1. A method for creating a message endpoint on a device in a distributed computing environment, the method comprising:</p> <p>receiving a request to create a message endpoint for a client on the device to communicate with a service within the distributed computing environment;</p> <p>obtaining an indication of a message schema for communication with the service and obtaining a service address for communication with the service;</p> <p>constructing said message endpoint, wherein said message endpoint is configured to send messages according to said message schema to said service address;</p> <p>and wherein said constructing is performed within a runtime environment of said device.</p>	<p>1. A method for creating a message endpoint on a device in a distributed computing environment, the method comprising:</p> <p>receiving an address for a service within the distributed computing environment;</p> <p>linking said address to a pre-generated message interface for accessing said service, wherein said message interface comprises computer-executable code built in to said device and wherein said linking creates a message endpoint for said device to send messages to said service at said address in order to access said service;</p> <p>using said message endpoint to send messages to said address to access said service.</p>

Art Unit: 2144

2. The method as recited in claim 1, wherein said constructing said message endpoint is performed by computer-executable message endpoint construction code already present on the device prior to said receiving a request to create a message endpoint.

1. A method for creating a message endpoint on a device in a distributed computing environment, the method comprising:

receiving a request to create a message endpoint for a client on the device to communicate with a service within the distributed computing environment;

obtaining an indication of a message schema for communication with the service and obtaining a service address for communication with the service;

constructing said message endpoint, wherein said message endpoint is configured to send messages according to said message schema to said service address;

and wherein said constructing is performed within a runtime environment of said device.

13. The method as recited in claim 1, wherein said obtaining an indication of a message schema comprises obtaining said message schema, wherein said message schema describes messages to

8. A method for pre-generating at least one message interface to be built-in to a device in order to access a service, the method comprising:

receiving a schema defining messages for accessing the service;

generating message endpoint code according to said schema;

linking said message endpoint code into executable operating code for the device and loading the message endpoint code and operating code onto the device.

be sent from said client to said service to access said service, and wherein said constructing said message endpoint comprises constructing said message endpoint to verify that messages sent from said client to said service comply with said message schema.	
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Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-7, 14-20, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Juster et al. (U.S. Patent Number 6,202,089), hereinafter referred to as Juster, in view of Stern et al. (U.S. Patent No. 5,935,249), hereinafter referred to as Stern.

8. Regarding claim 1, Juster disclosed a method for creating a message endpoint on a device in a distributed computing environment, the method comprising: receiving an address for a service within the distributed computing environment; linking said address to a message interface for accessing said service, wherein said message interface comprises computer code that is built at runtime and wherein said linking creates a message endpoint for said device to send messages to said service at said address in order to access said service; using said message endpoint to send

Art Unit: 2144

messages to said address to access said service (Abstract, Figures 2A-2B and associated text, column 2 lines 3-26, column 7 lines 10-31).

9. Juster taught the invention substantially as claimed. However, Juster did not specifically teach a pre-generated message interface wherein said message interface comprises computer-executable code built in to said device.

10. Juster suggested exploration of art and/or provided a reason to modify the method with the pre-generated message interface feature (column 2 lines 18-26).

11. In an analogous art, Stern disclosed a pre-generated message interface wherein said message interface comprises computer-executable code built in to said device (Title, Figures 4, 6, 7, 9, column 4 lines 1-14, column 8 lines 27-59).

12. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Juster with the teachings of Stern to include the pre-generated message interface feature in order to reduce processing resource at runtime since thin clients often low processor power and low memory capacity.

13. Regarding claim 2, Juster disclosed a method further comprising said message interface of said message endpoint verifying that said messages sent to said service comply with a message schema for said service (Abstract, Figures 2A-2B, column 2 lines 3-26).

14. Regarding claim 3-4, Stern disclosed a method wherein said message schema messages to be sent to and received from said service, wherein said messages are

Art Unit: 2144

defined in a data representation language and wherein said data representation language is eXtensible Markup Language (column 9 lines 3-47).

15. Regarding claim 5, Juster and Stern combined disclose a method further comprising: receiving an authentication credential indicating authorization to access said service; and wherein said linking comprises linking, said authentication credential to said pre-generated message interface, wherein said message endpoint is configured to include said authentication credential with each message sent to said address (Juster, Abstract, Figures 2A-2B, 4, -5, column 2 lines 4-26; Stern, Abstract, Figures 6, 7, column 9 lines 3-25, column 12 lines 13-49, column 13 lines 25-42).

16. Regarding claim 6, Stern disclosed a method further comprising: locating a service advertisement for said service, wherein said service advertisement indicates an authentication service; and requesting said authentication credential from said authentication service to access said service; and wherein said receiving an authentication credential comprises receiving said authentication credential from said authentication service (Figures Abstract, column 4 lines 1-14, column 9 lines 3-25, column 10 lines 29-67).

17. Regarding claim 7, Juster and Stern combined disclose a method further comprising: locating a service advertisement for said service, wherein said service advertisement comprises said address for said service and indicates a message schema for said service; wherein said receiving an address comprises receiving said address from said service advertisement; and wherein said linking comprises verifying that said pre-generated message interface corresponds to said message schema

Art Unit: 2144

(Juster, Abstract, Figures 2A-2B, 4, -5, column 2 lines 4-26; Stern, Abstract, Figures 6, 7, column 9 lines 3-25, column 12 lines 13-49, column 13 lines 25-42).

18. Regarding claims 14-20, the device in a distributed computing environment corresponds to the method of claims 1-7, and thus these claims are rejected using the same rationale.

19. Regarding claim 27, the carrier medium comprising instructions corresponds directly to the method of claim 1, and is rejected using the same rationale.

20. Since all the limitations of the claimed invention were disclosed by the combination of Juster and Stern, claims 1-7, 14-20, and 27 are rejected.

21. Claims 8-14, 21-26, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hind et al. (U.S. Patent Number 6,585,778), hereinafter referred to as Hind, in view of Lee et al. (U.S. Patent No. 6,336,137), hereinafter referred to as Lee.

22. Regarding claim 8, Hind disclosed a method for accessing services, the method comprising: receiving a schema defining messages for accessing the service; generating message endpoint code according to said schema (Abstract, Figures 2-4, column 4 lines 16-32, lines 50-59, column 7 lines 9-18).

23. Hind taught the invention substantially as claimed. However, Hind did not specifically teach linking said message endpoint code into executable operating code for the device and loading the message endpoint code and operating code onto the device.

Art Unit: 2144

24. Hind suggested exploration of art and/or provided a reason to modify the method with linking said message endpoint code into executable operating code for the device and loading the message endpoint code and operating code onto the device (Figure 6, column 13 lines 22-31).

25. In an analogous art, Lee disclosed linking said message endpoint code into executable operating code for the device and loading the message endpoint code and operating code onto the device (Figures 2-4, column 9 lines 21-45, column 12 lines 22-38).

26. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Hind with the teachings of Lee to include the linking message endpoint code into executable operating code for the device in order to reduce computing power and memory since wireless or handheld environment are physically small, have low processor power, have low memory capacity, and have narrow bandwidths (Lee, column 1 lines 56-62).

27. Regarding claim 9, Lee disclosed a method wherein said message endpoint is configured to verify that said messages sent from the device to the service comply with said schema (Title, Figure 4, column 5 lines 26-50, column 7 lines 10-24).

28. Regarding claim 10, Hind disclosed a method wherein said schema defines messages to be sent to and received from the service wherein said messages are defined in a data representation language (Figures 3-4, column 7 lines 19-33, column 9 lines 27-35).

Art Unit: 2144

29. Regarding claim 11, Hind disclosed a method wherein said data representation language is eXtensible Markup Language (Figures 3-4, column 7 lines 19-33).

30. Regarding claim 12, Lee disclosed a method wherein said generating comprises generating Java source code for said message endpoint and compiling said Java source code into bytecode (column 7 lines 25-43, column 8 lines 47-65).

31. Regarding claim 13, Lee disclosed a method further comprising repeating said receiving, said generating, and said linking for one or more additional schema corresponding to additional services (Figures 4-5, column 4 lines 24-35, column 9 lines 21-45).

32. Regarding claims 21-26, the tool for pre-generating corresponds to the method of claims 8-13, and thus these claims are rejected using the same rationale.

33. Regarding claim 28, the carrier medium comprising instructions corresponds directly to the method of claim 8, and is rejected using the same rationale.

34. Since all the limitations of the claimed invention were disclosed by the combination of Hind and Lee, claims 8-14, 21-26, and 28 are rejected.

Response to Arguments

35. Applicants' arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

36. In response to applicant's arguments over Liao et al. in view of Schwartz et al., examiner is withdrawing the reference as prior arts in regard to the present invention. However, in view of the new ground of rejection, claims 1-7, 14-20, and 27 are rejected.

Art Unit: 2144

37. In response to applicant's arguments over Hind et al. in view of Lee et al., these arguments have been fully considered but they are not persuasive because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited. Thus, claims 8-14, 21-26, and 28 remain rejected.

38. In general, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Simply restating the limitation of the claimed invention and providing Applicant's own interpretation of the prior arts will not helping further advance prosecution. In addition, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

39. As the rejection reads, Examiner asserts that the combination of these teachings render the claimed invention obvious.

Conclusion

40. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

- a. Jenkins (U.S. Patent Number 6,401,114) titled "Method and apparatus for dynamic programming across a computer network" disclosed a method and apparatus for building and assembling programs across a computer network in order to perform required functions for each client. The invention is accomplished by providing an environment that permits the user to assemble programs from

components over a computer network by defining or re-defining the necessary logical program components. Execution of the logical components requires the base programming language to have the ability to dynamically load, bind and execute pre-built logical component of programming code.

b. Venkatraman et al. (U.S. Patent Number 6,571,388) titled "Building a custom software environment including pre-loaded classes" disclosed a system for creating a custom software environment, which is pre-built for executing the application program in a target device. The system broadens the applicability of software environments like Java by providing custom pre-loaded classes for application programs and by customizing the procedures for class loading to the available resources in the target device. The system includes tools for generating a pre-load class list that specifies a set of classes needed to support the application program. The tools build the custom environment including a set of code for a virtual machine and a set of code for each of a set of pre-loaded classes specified in the pre-load class list. The virtual machine loads classes from the pre-loaded classes, a file system class library, and/or a networked class library using widely available network protocols.

41. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam (Jenny) Phan whose telephone number is (703) 305-4665 or (571) 272-3930 (new telephone number after October 2004). The examiner can normally be reached on M-F 9:00-5:00.

Art Unit: 2144

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on 703-308-3873 or (571) 272-3925 (new telephone number after October 27, 2004). The fax phone number for the organization

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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October 1, 2004